

NOTE

Baetis magnus, new species, formal new
name for *Baetis* sp. B of Morihara and McCafferty
(Ephemeroptera: Baetidae)

Morihara and McCafferty (1979. Trans. Am. Entomol. Soc. 105: 139–221) described two unique larval specimens from Arizona and New Mexico as *Baetis* sp. B. Although an adequately comparative description was presented, a formal name and new species were not established because of the paucity of material and knowledge of species variability at that time. Since then, we have examined over 200 similar specimens from western U.S.A., especially the Pine Ridge area of far western Nebraska, that fully substantiate the existence of a distinctive yet unnamed species as was earlier hypothesized.

Therefore, with reference to the description of *Baetis* sp. B (pp. 161–162) and figure 20 (p. 195) of Morihara and McCafferty (1979), we hereby establish the name *Baetis magnus* NEW SPECIES to replace the previous informal name *Baetis* sp. B Morihara and McCafferty. We furthermore designate the types of *B. magnus* as follows: Holotype: larva, Nebraska, Dawes Co., Squaw Cr, V-30-1984, R. Lawson & K. Brown, Purdue Univ. Entomol. Res Coll. (PERC). Paratypes: 3 larvae, same data and deposition as holotype; 1 larva, Arizona, Yavapai Co., Verde R, IV-9-1968, R. Koss & R. Baumann (slide mounted in balsam, solvent xylene), PERC; 10 larvae, NE, Dawes Co., Chadron St Prk, Chadron Cr, VI-25-1984, R. Lawson, PERC; 3 larvae, NE, Sioux Co., Sowbelly Canyon Cr, V-28-1984, R. Lawson & K. Brown, PERC; 38 larvae, NE, Dawes Co., Rapid Cr below Pactola Dam, VII-22-1977, R. Lawson & K. Brown, U.S. Ntl. Museum; 38 larvae, NE, Dawes Co., West Ash Cr, V-25-1984, R. Lawson & K. Brown, California Acad. Sci.; 1 larva, New Mexico, Grant Co., Cherry Cr, 14 mi N Silver City, IX-9-1967, R. Koss (slide mounted, balsam), PERC.

Mature larvae of *B. magnus*, which range in length from 7 to 13 mm (not including caudal filaments), resemble large larvae of *Baetis tricaudatus* Dodds, a species also placed in the *rhodani* group (Morihara and McCafferty, 1979). Even in the field, however, these two species are separable by the more elongate gills of *B. magnus* (length ca. $1.5 \times$ width) vs. those of *B. tricaudatus* (length subequal to width). Whereas *B. tricaudatus* is a widespread, variable, and relatively ubiquitous species in North America, *B. magnus* apparently is found only disjunctly in small, mostly spring-fed streams of the West, sometimes coexisting with *B. tricaudatus*. Additional characteristics that distinguish *B. magnus* were given by Morihara and McCafferty (1979), but note that *B. magnus* will key to *B. sp. A*, not *B. sp. B*, in the larval key presented there due to an inadvertent transcription error. Because we possess only one reared female subimago of *B. magnus* and one associated but not reared male adult, and because adults of the *rhodani* group are essentially inseparable at the species level on the basis of current information, any description of the adult at this time would be tenuous.

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